TO: Douglas County Health Care Providers  
FROM: Adi Pour, PhD, Director, Douglas County Health Department  

SUBJECT: Investigation of a case of active tuberculosis

This memo is to inform you that the Douglas County Health Department (DCHD) is investigating a case of active, smear-positive, pulmonary tuberculosis (TB) in a Benson High School student. We are providing this information to you because it is possible you will get questions from parents or others.

What the Douglas County Health Department is doing:

- Conducting a thorough investigation of the patient’s period of infectiousness, close contacts, and usual activities (school and extra-curricular)
- Restricting the patient’s activities until sputum smears for acid-fast bacilli are negative
- Directly observing the patient’s medication intake to ensure compliance
- Working closely with school officials to notify parents of those identified as having had close contact in classrooms (approximately 200). Testing is only recommended for these individuals.
  - Parents/guardians will receive a letter on Wednesday, November 30, 2016.
  - An exposed person will have a letter addressed to them specifically.
  - A parent informational meeting will take place at Benson HS Thursday evening, December 1, 2016 at 6:30pm.
  - IGRA testing (QuantiFERON™-TB Gold In-Tube test) will be performed by DCHD on December 6, 7, 8, and 9 at Benson High School for those identified by DCHD as exposed.
  - Follow-up IGRA testing will be performed again in 8-12 weeks.

At this time, DCHD is not recommending routine antibiotic prophylaxis for exposed persons.

General Information about Tuberculosis

Prolonged or repeated exposure to an infectious case may lead to infection. The incubation period from infection to demonstrable primary lesion or significant tuberculin reaction is approximately 2 – 10 weeks. Risk of progression to active TB (5-10% of those infected) is greatest within one to two years after infection. Latent (asymptomatic) infection (LTBI) can last a lifetime, but reactivation can occur after many years if untreated (5% of those with LTBI). Symptoms of TB include productive cough, fever, and weight loss. Occasionally, patients may present with hemoptysis or chest pain. Other systemic symptoms include anorexia, fatigue, or night sweats.

The risk of acquiring TB depends on several factors, such as extent of disease in the source patient, duration of exposure, and ventilation. TB bacilli become aerosolized when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. These bacilli can float in the air for several hours, depending on the environment. Persons who breathe air containing these TB bacilli can become infected. Transmission has been documented in association with patients who have TB lung disease, and bacteria seen or cultured in sputum. Persons who become infected usually have been exposed for several hours (or days) in poorly ventilated or crowded environments. Immunocompromised persons are at higher risk for disease once infected.

For further information, please feel free to call:  
Douglas County Health Department, Epidemiology Section: 402-444-7214